

HALFTONING USING DOT AND LINE SCREENS TO AVOID TWO AND THREE COLOR MOIRÉ

ABSTRACT OF THE DISCLOSURE

5 Moiré free color halftoning is achieved through the use of two dot screens and one
or two line screens. The line screens may be, for example hybrid line screens. Frequency
vectors associated with the screens combine to produce moiré frequency
vectors representing moiré frequencies above or below the visual range. In one
embodiment lines screens are used to halftone yellow and black separations and dot
10 screens are used to halftone cyan and magenta separations. The dot screens are oriented
at 15 and 75 degrees. The line screens are oriented at 45 and 135 degrees. Selected
screens and screen orientations minimize screen interaction with mechanical or optical
artifacts of a rendering device, thereby minimizing mechanical and optical moiré.

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